

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/622,582	LIVINGSTONE, JAMES I.
Examiner	Art Unit	
Giovanna M. Collins	3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 21 July 2003.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-97 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-97 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 July 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,582	07/21/2003	James I. Livingstone	A894610US	3395
7590	05/26/2004		EXAMINER	
Irene F. Bridger c/o Gowling Lafleur Henderson LLP Suite 1400 700-2nd Street S.W. Calgary, T2P 4V5 CANADA			COLLINS, GIOVANNA M	
			ART UNIT	PAPER NUMBER
			3672	
			DATE MAILED: 05/26/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a) because they fail to show the shroud (in Figs 2a and 3a) in relatively air tight and frictional engagement with the inner wellbore wall as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to because Fig. 1 does not show how the compressed air (36) gets through the piston (24) to get to the venturi (34) in the inner pipe (6). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the rotary table or top drive must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

### ***Claim Objections***

Claims 16 and 61-63 are objected to because of the following informalities:

In claim 16, the phrase “The method of claim 14 should be changed to - - The method of claim 15 - -.

In claims 61 and 62, the phrase “The method of claim 52 should be changed to - - The method of claim 59 - -.

In claim 63, the phrase "The method of claim 1 should be changed to - - The method of claim 52 - -.

Appropriate correction is required.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1,4-6,10-12,16-24,26,27,32-34,37-44,52,56-58,63-65,68-76,81-83,86-90 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1,3,5-9,12-20, and 24-26 of copending Application No. 10/346125. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application limitations although broader are obviously met by the copending application 10/346125.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1,3,5,6,10-24,26,28,32-52,55,57,58,63-76,81-97 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over

claims 1-3,11-23,25,30-43, and 46 of copending Application No. 10/347861. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application limitations although broader are obviously met by the copending application 10/347861.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1,4-6,10-24,26-27,32-44,52,56-58,63-76, and 81-90 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of copending Application No. 10/644,748. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application limitations although broader are obviously met by the copending application 10/644748.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1,3,5,6,10-24,26,28,32-52,55,57,58,63-75,77, and 81-97 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4,7,11-12,15-24,30,35,38-49,51, and 54 of copending Application No. 10/644,749. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application limitations although broader are obviously met by the copending application 10/644749.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1,2,19,52, 54 and 72 are rejected under 35 U.S.C. 102(b) as being anticipated by Stewart ('503).

Referring to claims 1 and 52, Stewart discloses (see Fig. 2) a method for removing material from a well bore comprising delivering into said well bore a concentric or production tubing string, said tubing string comprising an inner tube (4) means having an inner annulus therethrough and an outer tube means (5) forming an outer annulus between said outer tube means and said inner tube means; introducing (at 25) into said well bore a pressurized clean out medium through one of the said inner annulus and outer annulus and removing (at 10) said material and clean out medium through the other of the said inner annulus and said outer annulus to the surface of said well bore.

Referring to claims 2 and 54, Stewart discloses the cleanout medium (25) is introduced at or below the formation pressure (see col. 1, lines 30-39)

Referring to claims 19 and 72, Stewart discloses the clean out medium is introduced through the inner annulus (see Fig. 2, at 25) and said material and cleanout medium are exhausted (see Fig. 2 at 10) through the outer annulus.

2. Claims 1,3,5-7,18,22,52,55,57-59, 68 and 71 are rejected under 35 U.S.C. 102(b) as being anticipated by Smet ('223).

Referring to claims 1 and 52, Smet discloses (see Fig. 4) a method for removing material from a well bore comprising delivering into said well bore a concentric or production tubing string, said tubing string comprising an inner tube (6) means having an inner annulus therethrough and an outer tube means (5) forming an outer annulus between said outer tube means and said inner tube means; introducing into said well bore a pressurized clean out medium through one of the said inner annulus and outer annulus and removing said material and clean out medium through the other of the said inner annulus and said outer annulus to the surface of said well bore (see col. 4, lines 19-36).

Referring to claims 3 and 55, Smet discloses said concentric tubing string (5) is a concentric coiled tubing string.

Referring to claims 5 and 57, Smet discloses said material comprises one or more of solid particles, sediment, injection fluids, fracturing acids, sands, and drilling fluids (see col. 1, lines 64-68).

Referring to claim 6 and 58 Smet discloses said clean out medium is selected from the group consisting of drilling mud, drilling fluid, air, gas, acids and a mixture of drilling fluid and gas (see col. 1, lines 5-13)

Referring to claim 7 and 59 Smet discloses the tubing string having a top and a bottom, wherein said pressurized clean out medium is introduced by a discharging means (see fig. 1, at 17) operably connected near the top of said concentric tubing string in communication with either said inner annulus or said outer annulus.

Referring to claims 18 and 71 Smet discloses the clean out medium is sent through the outer annulus and the material and cleans out medium is removed through the inner annulus (see Fig.4).

Referring to claim 22, Smet discloses a venturi (31) and accelerating the exhaust through the venturi.

Referring to claim 68, Smet discloses a clean out tool (35) for disturbing the material.

3. Claims 1,4,7,9, 23,24,52,56,59 and 62 are rejected under 35 U.S.C. 102(b) as being anticipated by Kunnemann ('618).

Referring to claims 1 and 52, Kunnemann discloses (see Fig. 1) a method for removing material from a well bore comprising delivering into said well bore a concentric or production tubing string , said tubing string comprising an inner tube (16) means having an inner annulus therethrough and an outer tube means (18) forming an outer annulus between said outer tube means and said inner tube means; introducing (at 28) into said well bore a pressurized clean out medium through one of the said inner annulus and outer annulus and removing said material and clean out medium through the other of the said inner annulus and said outer annulus to the surface of said well bore.

Referring to claims 4 and 56, Kunnemann discloses a concentric drill pipe string (16,18).

Referring to claims 7 and 59, Kunnemann discloses the tubing string having a top and a bottom, wherein said pressurized clean out medium is introduced by a discharging means (24) operably connected near the top of said concentric tubing string in communication with either said inner annulus or said outer annulus.

Referring to claims 9 and 62, Kunnemann disclose the discharging means (24) is a compressor.

Referring to claims 23-24, Kunnemann discloses the step of providing a shroud (62) positioned in a space between an outside wall of the outer tube and a wall of the well bore for preventing a release of clean out medium in the space or the formation (see col. 4, lines 39-47).

4. Claims 1,15-17, 52 and 68-70 are rejected under 35 U.S.C. 102(b) as being anticipated by Farris et al. ('844).

Referring to claims 1 and 52, Farris discloses (see Fig. 5) a method for removing material from a well bore comprising delivering into said well bore a concentric or production tubing string , said tubing string comprising an inner tube (78) means having an inner annulus therethrough and an outer tube means (26) forming an outer annulus between said outer tube means and said inner tube means; introducing (at 46) into said well bore a pressurized clean out medium through one of the said inner annulus and outer annulus and removing (at 50) said material and clean out medium through the other of the said inner annulus and said outer annulus to the surface of said well bore.

Referring to claim 15-17 and 68-70, Farris discloses a reciprocating clean out tool (20) that is reciprocating piston (see col. 1, lines 57-60) and comprises a plurality of teeth (86).

5. Claims 1,25,52,53,59 and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by International Patent WO0120124 to Misslebrook et al.

Referring to claims 1 and 52, Misslebrook discloses (see Figs. 6 and 11) a method for removing material from a well bore comprising delivering into said well bore a concentric or production tubing string , said tubing string comprising an inner tube (50) means having an inner annulus therethrough and an outer tube means (32) forming an outer annulus between said outer tube means and said inner tube means; introducing into said well bore a pressurized clean out medium (at 59) through one of the said inner annulus and outer annulus and removing said material and clean out medium through the other of the said inner annulus and said outer annulus to the surface of said well bore (see Page 7, paragraph 5).

Referring to claims 25,53 and 60, Misslebrook discloses a casing (30) having perforations (36).

Referring to claim 59, Misslebrook discloses a discharging means (57) connected near the top of the production tubing.

6. Claims 26,27,29,30,75,76,78, and 79 are rejected under 35 U.S.C. 102(b) as being anticipated by Fischer ('394)

Referring to claim 26 and 75, Fischer discloses (see Fig. 1) an apparatus for removing material from a well bore comprising a concentric tubing string or production tubing string having an inner tube means(3) with an inner annulus and an outer tube means (4) with an outer annulus between the outer and inner tube means, means (10) to introduce a pressurized cleanout medium through the inner or outer annulus and means (9) to remove material and the clean out medium through the other of the inner or outer annulus.

Referring to claims 27 and 76, Stewart teaches a concentric drill pipe string (3,4).

Referring to claims 29 and 78 , Fischer discloses the introducing means (10) is operably connected near the top of the concentric tubing sting or production string in communication with the inner annulus.

Referring to claims 30 and 79, Fischer discloses a mud pump (10).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 7-8, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart ('503) in view of Fischer et al. ('394).

Stewart teaches the method of claim 1 but does not discloses a discharging means.

Fischer teaches (see Fig. 1) using a pump (10) to send a cleanout fluid down a dual string. As one of ordinary skill would be familiar with the use of a pump to supply pressurized fluid, it would be obvious to modify Stewart, to have a pump introduce the cleanout fluid as taught by Fischer.

Referring to claim 8, Fischer teaches a mud pump (10).

Referring to claim 61, Stewart teaches the method of claim 52 but does not discloses a discharging means that is a mud pump. Fischer teaches (see Fig. 1) using a pump (10) to send a cleanout fluid down a dual string. As one of ordinary skill would be familiar with the use of a

pump to supply pressurized fluid, it would be obvious to modify Stewart, to have a pump introduce the cleanout fluid as taught by Fischer.

9. Claims 10,11,26,31-33,44, 63, 64,75 and 80-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kunnemann ('618) in view of Sinclair ('515).

Referring to claims 10 and 63, Kunnemann discloses the method of claim 1 but does not discloses a suction means. Sinclair teaches (see Fig. 1) using a suction compressor to help remove a cleanout fluid (see col. 2, lines 59-60). As it would be advantageous to have a suction compressor to help the cleanout medium remove the material, it would be obvious to modify Kunnemann to have a suction compressor as taught by Sinclair.

Referring to claims 11 and 64, Sinclair teaches a suction compressor (see col. 2, lines 59-60).

Referring to claim 26 and 75, Kunnemann discloses (see Fig. 1) an apparatus for removing material from a well bore comprising a concentric tubing string or production tubing string having an inner tube means(16) with an inner annulus and an outer tube means (18) with an outer annulus between the outer and inner tube means, means (24) to introduce a pressurized cleanout medium through the inner or outer annulus and removing the material and the clean out medium through the other of the inner or outer annulus. Kunnemann does not disclose a removing means. Sinclair teaches (see Fig. 1) using a suction compressor to help remove a cleanout fluid (see col. 2, lines 59-60). As it would be advantageous to have a suction compressor to help the cleanout medium remove the material, it would be obvious to modify Kunnemann to have a removing means as taught by Sinclair.

Referring to claims 31 and 80, Kunnemann discloses a discharging compressor (24).

Referring to claims 32 and 81, Sinclair teaches (see Fig. 1) the removing means (38) is operably connected near the top of the concentric tubing sting or production string.

Referring to claim 33 and 82, Sinclair teaches a suction compressor (38).

Referring to claim 44, Kunnemann discloses a shroud (62) positioned in a space between an outside wall of the outer tube and a wall of the well bore for preventing a release of clean out medium in the space (see col. 4, lines 39-47).

10. Claims 26,28,45-49,75,77,91-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smet ('223) in view of Sinclair ('515).

Referring to claim 26 and 75, Smet discloses (see Fig. 4) an apparatus for removing material from a well bore comprising a concentric tubing string or production tubing string having an inner tube means(6) with an inner annulus and an outer tube means (5) with an outer annulus between the outer and inner tube means, means (17) to introduce a pressurized cleanout medium through the inner or outer annulus and removing the material and the clean out medium through the other of the inner or outer annulus. Smet does not disclose a removing means.

Sinclair teaches (see Fig. 1) using a suction compressor to help remove a cleanout fluid (see col. 2, lines 59-60). As it would be advantageous to have a suction compressor to help the cleanout medium remove the material, it would be obvious to modify Smet to have a removing means as taught by Sinclair.

Referring to claims 28 and 77, Smet discloses concentric coiled tubing string (5).

Referring to claims 45-47 and 91-93, Smet discloses a bottom hole assembly that is a reciprocating clean out tool attached to a rotation means (see col. 5, lines 36-47).

Referring to claims 48-49 and 94-95, Smet discloses connecting means and disconnecting means (at 25 and 28).

11. Claims 26,28,50-51,75,77,91, and 96-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over International Patent WO0120124 to Misslebrook et al. in view of Fischer et al. ('394).

Referring to claims 26 and 75, Misslebrook discloses (see Figs. 6-11) an apparatus for removing material from a well bore comprising a concentric tubing string or production tubing string having an inner tube means(50) with an inner annulus and an outer tube means (32) with an outer annulus between the outer and inner tube means, means (57) to introduce a pressurized cleanout medium through the inner or outer annulus and removing the material and the clean out medium through the other of the inner or outer annulus. Misslebrook does not disclose a removing means. Fischer teaches (see Fig. 1) using a removing means (9) to help remove a cleanout fluid and other materials.. As it would be advantageous to have a removing means to help the cleanout medium remove the material, it would be obvious to modify Misslebrook to have a removing means as taught by Fischer.

Referring to claims 28 and 77, Misslebrook discloses coiled tubing string (50).

Referring to claims 50-51 and 96-97, Misslebrook discloses means (a work reel) for storing the coiled tubing string (see Fig. 27).

12. Claims 26,37-41 and 86-88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farris et al. ('844) in view of Kunnemann ('618) and Sinclair ('515).

Referring to claim 26 and 75, Farris discloses (see Fig. 5) an apparatus for removing material from a well bore comprising a concentric tubing string or production tubing string having an inner tube means (30) with an inner annulus and an outer tube means (28) with an outer annulus between the outer and inner tube means, introducing a pressurized cleanout medium through the inner or outer annulus and removing the material and the clean out medium through the other of the inner or outer annulus. Farris does not disclose an introducing means or a removing means. Kinnemann teaches (see Fig. 1) a discharge compressor (24) to supply compressed air to concentric tubing. Sinclair teaches (see Fig. 1) using a suction compressor to help remove a cleanout fluid (see col. 2, lines 59-60). As one of ordinary skill in the art would be familiar with the use of a compressor to supply air and as it would be advantageous to have a suction compressor to help the cleanout medium remove the material, it would be obvious to modify Farris to have a introducing means as taught by Kinneman and to have a removing means as taught by Sinclair.

Referring to claims 37-39 and 86-88, Farris discloses a reciprocating clean out tool (20) that is reciprocating piston (see col. 1, lines 57-60) and comprises a plurality of teeth (86).

Referring to claims 40-41, Farris discloses a diverter means that is a venturi (80,82).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 703-306-5707. The examiner can normally be reached on 6:30-3 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 703-308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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